U.S. DEPARTMENT OF COMMERCE Form PTO-1449

PATENT AND TRADEMARK OFFICE 36969US1 TBD

INFORMATION DISCLOSURE CITATION BY APPLICANT (USE SEVERAL SHEETS IF NECESSARY)

APPLICANT:

J. William Doane et al.

Page 1 of 12

FILING DATE: Herewith

**GROUP ART UNIT:** 

				Herewit	th	TBD	
			U.S. PA	TENT DOCUMENT	S		
Examiner Initial				Name	Class	Subclass	Filing Date
	Α	4,510,188	4/1985	Ruggeri			
	В	4,642,250	2/1987	Spector			
	С	4,747,413	5/1988	Bloch			
	D	5,061,553	10/1991	Olsen, Jr.			
	Е	5,161,479	11/1992	Mahr			
	F	5,360,503	11/1994	Coffy			
	G	5,376,699	12/1994	Sage			
	Н	5,453,863	9/1995	West et al.			
	I	5,981,408	11/1999	Nakagawa et al.			
	J	6,072,619	6/2000	Kiryuschev et al.			
	K	6,096,666	8/2000	Jachimowicz et al.			
	L	6,270,783	8/2001	Slavtcheff et al.			
			FOREIGN	PATENT DOCUME	NTS		
		Document No.	Date	Country	Class	Subclass	Translation
	M	92/11311	7/1992	wo			
	N	2005/072447	8/2005	wo	_		
	Р	2005/081779	9/2005	wo			
	C	THER REFEREN	CES (Includ	ling Author, Title, Da	te, Pertinent	Pages, Etc.)	
	Q			conductive layer and al., Journal of the SI			
	R			ular alignment of lique f the SID, Vol. 31/4,			s, Anna
Examiner:		/Nitin Patel/		Date C	Considered	01/19/2	2010
*Examiner	:	MPEP 609; Draw	line through	regardless of whethe citation if not in conmmunication to appli	formance and		

IAP11 Rec'd PCT/PTO 28 JUL 2006

Form PTO-1449

U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE

ATTY. DOCKET NO. **36969US1** 

SERIAL NO. **TBD** 

INFORMATION DISCLOSURE CITATION BY APPLICANT (USE SEVERAL SHEETS IF NECESSARY)

Page 2 of 12

APPLICANT:

J. William Doane et al.

FILING DATE:
Herewith

GROUP ART UNIT:

**TBD** 

U.S. PATENT DOCUMENTS Examiner Document No. Date Name Class Subclass Filing Date Initial 8/2001 Α 6,277,439 **Painter** В 6,603,259 8/2003 Kiryuschev et al. C 6,608,438 8/2003 Topelberg et al. D 6,624,565 9/2003 Topelberg 6,654,080 11/2003 Khan et al. E F 6,697,191 2/2004 Kiryuschev et al. G 6,727,197 4/2004 Wilson et al. Η 6,788,362 9/2004 Stephenson et al. I 2005/0007336 1/2005 Albert et al. 2003/0202136 10/2003 J Stephenson et al. K 2004/0032545 2/2004 Stephenson et al. 2003/0016329 1/2003 L Smith et al. FOREIGN PATENT DOCUMENTS Document No. Date Class Country Subclass Translation M N P OTHER REFERENCES (Including Author, Title, Date, Pertinent Pages, Etc.) Transparent phase images in photoactivated liquid crystals, J.S. Margerum et al., Applied Physics Letter, Volume 19, Number 7, October 1, 1971, pp. 216-218. 16.3: Development of a flexible electronic display using photographic technology, R Stanley W. Stephenson et al., SID 04 Digest, pp. 774-777. Examiner: Date Considered /Nitin Patel/ 01/19/2010 \*Examiner: Initial if reference considered, regardless of whether citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Form PTO-1449

U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE

36969US1

SERIAL NO.

INFORMATION DISCLOSURE CITATION BY APPLICANT (USE SEVERAL SHEETS IF NECESSARY)

APPLICANT:

J. William Doane et al.

Page 3 of 12 FILING DATE: Herewith

GROUP ART UNIT:

| TBI

				H	lerewith ———		TBD	
		<del></del>	U.S. PA	TENT DOCU	MENTS			
Examiner Initial		Document No.	Date	Name		Class	Subclass	Filing Date
	Α	2003/0117548	6/2003	Stephenson				
	В	2003/0034945	2/2003	Mi et a	Mi et al.			
	С	2003/0019575	1/2003	Smith et	al.			
	D	2003/0206147	11/2003	Mi et a	ı1.			
	E	3,600,060	8/1971	Churchl	nill			
	F	4,684,771	8/1987	Wuthri	ch			
	G	4,688,900	8/1987	Doane e	t al.			
	Н	6,271,898	8/2001	Clikeman	et al.			
	I	6,423,368	7/2002	Stephensor	et al.			
	J	6,459,467	10/2002	Hashimoto	Hashimoto et al.			
	K	4,890,902	1/1990	Doane et al.				
	L	6,061,107	5/2000	Yang et	al.			
			FOREIGN	PATENT DO	CUMENT	ΓS		
		Document No.	Date	Countr	ту	Class	Subclass	Translation
	M							
	N							
	P							
	C	THER REFEREN	CES (Includ	ling Author, Ti	tle, Date,	Pertinent	Pages, Etc.)	
	Q	A fully flexible co	lour display	, Peter Slikker	veer et a	1., SID 04 I	Digest, pp. 7	70-773.
	R	Robust Flexible LCD's with Paintable Technology, Joost P.A. Vogels et al., SID 04 Digest, pp. 767-769.						
Examiner:		/Nitin Patel/			Date Cor	nsidered	01/19/2	010
*Examiner		Initial if reference MPEP 609; Draw I copy of this form v	line through	citation if not	in confo	rmance and		

U.S. DEPARTMENT OF COMMERCE

PATENT AND TRADEMARK OFFICE

36969US1

**TBD** 

INFORMATION DISCLOSURE CITATION BY APPLICANT

(USE SEVERAL SHEETS IF NECESSARY)

Page 4 of 12

APPLICANT:

J. William Doane et al.

FILING DATE: Herewith

GROUP ART UNIT:

						···	<u>l</u>		
			U.S. PA	TENT DOCU	MENTS	_			
Examiner Initial		Document No.	Date	Name		Class	Subclass	Filing Date	
	Α	6,359,673	3/2002	Stepher	ison				
	В	6,423,368	7/2002	Stephenso	Stephenson et al.				
	С	6,433,849	8/2002	Low	е				
	D	6,556,262	4/2003	Stephenso	n et al.				
	E	6,585,849	7/2003	Smith e	t al.				
	F	6,618,114	9/2003	Freem	an				
	G	3,680,950	8/1972	Haas e	al.				
	Н	5,437,811	8/1995	Doane e	et al.				
	I	5,200,845	4/1993	Crooker	et al.				
	J	5,644,330	7/1997	Catchpole	et al.	·			
	K	5,748,277	5/1998	Huang e	et al.				
	L	5,668,614	9/1997	Chien e	t al.				
			FOREIGN	PATENT DO	CUMENT	rs			
		Document No.	Date	Count	ry	Class	Subclass	Translation	
	M								
	N								
	P								
	С	THER REFERENCE	CES (Includ	ling Author, T	itle, Date,	Pertinent	Pages, Etc.)		
	Q	10.1: Invited pape 04 Digest, pp. 128		electronic pa <sub>l</sub>	er? The e	expectation	s, Makoto O	modani, SID	
	R	Effect of woven fabric anisotropy on drape behaviour, V. Sidabraite et al., ISSN 1392-1320, Materials Science, Vol. 9, No. 1, 2003, pp. 111-115.							
Examiner:		/Nitin Patel/			Date Cor	nsidered	01/19	)/2010	
*Examiner:		Initial if reference MPEP 609; Draw I copy of this form v	line through	citation if no	t in confo	rmance and			

U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE

ATTY. DOCKET NO. 36969US1

SERIAL NO.

TBD

INFORMATION DISCLOSURE CITATION
BY APPLICANT

(USE SEVERAL SHEETS IF NECESSARY)

Page 5 of 12

APPLICANT:

J. William Doane et al.

FILING DATE: **Herewith** 

GROUP ART UNIT:

		· · · · · · · · · · · · · · · · · · ·	U.S. PA	TENT DOCUM	IENTS	<del>, </del>		
Examiner Initial		Document No.	Date	Name Lu et al.		Class	Subclass	Filing Date
	Α	5,493,430	2/1996					
	В	6,359,673	3/2002	Stephenso	Stephenson			
	С	6,377,321	4/2002	Khan et a	1.			
	D	6,483,563	11/2002	Khan et a	1.			
	Е	6,532,052	3/2003	Khan et a	1.			
-	F	5,847,798	12/1998	Yang et a	1.			-
	G	6,320,563	11/2001	Yang et a	1.			
	Н	6,154,190	11/2000	Yang et a	1.			
	I	6,133,895	10/2000	Huang				
	J	6,034,752	3/2000	Khan et a	Khan et al.			
	K	2002/0030786	4/2002	Stephenson				
	L	2003/0085380	5/2003	Schumacher	et al.			
			FOREIGN	PATENT DOC	JMEN'	rs		
		Document No.	Date	Country		Class	Subclass	Translation
	M							
	N			• "				_
	P							
	C	THER REFEREN	CES (Includ	ling Author, Titl	e, Date,	Pertinent .	Pages, Etc.)	
	Q	The characterizat Text. Inst., 1997,				e of fabrics	, G.K. Stylic	s et al., J.
	R	Modelling the fus Fibers & Textiles						
Examiner:		/Nitin Patel/		Г	Date Con	nsidered	01/19/2	2010
*Examiner		Initial if reference MPEP 609; Draw I copy of this form v	line through	citation if not i	n confo	rmance and		

Form PTO-1449

U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE

36969US1

SERIAL NOUD.

INFORMATION DISCLOSURE CITATION
BY APPLICANT
(USE SEVERAL SHEETS IF NECESSARY)

APPLICANT:

J. William Doane et al.

Page 6 of 12

FILING DATE: Herewith

GROUP ART UNIT:

			U.S. PA	TENT DOCU	MENTS				
Examiner Initial		Document No.	Date	Name		Class	Subclass	Filing Date	
	Α	2003/0063245	4/2003	Bowley et al.					
	В	2005/0083284	4/2005	Huang et al.					
	С	2003/0071791	4/2003	Hanson	et al.				
	D	5,691,795	11/1997	Doane et al.					
	E	2003/0155151	8/2003	Hermann	s et al.				
	F	6,468,638	10/2002	Jacobsen	et al.				
	G	6,316,278	11/2001	Jacobsen	et al.				
	Н	5,007,872	4/1991	Tang	g				
	I	4,362,903	12/1982	Eichelberg	er et al.				
	J	4,896,946	1/1990	Suzuki (	Suzuki et al.				
	K	5,889,572	3/1999	Takahashi et al.					
	L	4,948,232	8/1990	Lang	е				
			FOREIGN	PATENT DO	CUMEN	TS			
		Document No.	Date	Count	ry	Class	Subclass	Translation	
	M					·		-	
	N	ı							
	P			•					
	C	THER REFERENCE	CES (Includ	ling Author, T	itle, Date	, Pertinent	Pages, Etc.)		
	Q	Mechanics of elas Research Journal,				ls, Chaunce	y Chu et al.,	Textile	
	R	R The dependence of fabric drape on bending and shear stiffness, G.E. Cusick, J. Textile Institute 36, 11, 1965, pp. T597-T-607.							
Examiner:		/Nitin Patel/			Date Co	nsidered	01/19/2	2010	
*Examiner	:	Initial if reference MPEP 609; Draw I copy of this form v	ine through	citation if no	t in confo	ormance and			

U.S. DEPARTMENT OF COMMERCE

PATENT AND TRADEMARK OFFICE 36969US1

ATTY. DOCKET NO.

SERIAL NO.

**TBD** 

INFORMATION DISCLOSURE CITATION BY APPLICANT

(USE SEVERAL SHEETS IF NECESSARY)

Page 7 of 12

APPLICANT:

J. William Doane et al.

FILING DATE: Herewith

GROUP ART UNIT:

			U.S. PA	TENT DOCU	MENTS			
Examiner Initial		Document No.	Date	Name		Class	Subclass	Filing Date
	Α	5,751,257	5/1998	Sutherl	and			
	В	6,710,760	3/2004	Johnson et al. Sutherland				
	С	6,253,190	6/2001					
	D	6,269,342	7/2001	Brick e	al.			
	Е	6,657,620	12/2003	Oishi e	al.			
· <del>-</del>	F	5,734,155	3/1998	Rostol	er			
	G	2003/0169221	9/2003	Stephenso	n et al.			
	Н	2002/0186182	12/2002	Stephenso	n et al.			
	I	2003/0222139	12/2003	Stephenso	n et al.			
	J	2004/0080477	4/2004	Capurso	et al.			
	K	2003/0160912	8/2003	Stephen	Stephenson			
	L	6,307,605	10/2001	Baile	у			
			FOREIGN	PATENT DO	CUMEN	ΓS		
		Document No.	Date	Count	гу	Class	Subclass	Translation
	M		·		٠			
	N							
	P							
	C	THER REFEREN	CES (Includ	ling Author, T	tle, Date,	, Pertinent	Pages, Etc.)	
	Q	Liquid crystal dis Vol. 1, pp. xi-xv,		aul S. Drzaic,	World Sc	ientific, Ser	ries on Liqu	id Crystals,
	R	6.3: Plastic VGA SID proceedings,			Os with dy	ynamic driv	e, G.M. Pod	ojil et al.,
Examiner:		/Nitin Patel			Date Co	nsidered	01/19/2	010
*Examiner	:	Initial if reference MPEP 609; Draw I copy of this form v	line through	citation if no	t in confo	rmance and		

U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE

ATTY. DOCKET NO. 36969US1

SERIAL NO.

TBD

## INFORMATION DISCLOSURE CITATION BY APPLICANT

(USE SEVERAL SHEETS IF NECESSARY)

Page 8 of 12

APPLICANT:

J. William Doane et al.

FILING DATE: Herewith

GROUP ART UNIT:

	-		IIC DA	TENT DOCU	MENITS				
Examiner Initial		Document No.	Date	Name	_	Class	Subclass	Filing Date	
	Α	6,902,454	6/2005	Petrucl	Petruchik				
	В	6,655,788	12/2003	Freem	an	-			
	С	6,224,964	5/2001	Kawai e	t al.				
	D	6,268,839	7/2001	Yang et	al.				
	Е	2002/0030776	3/2002	Khan et	al.				
	F	6,452,590	9/2002	Awamoto	et al.				
	G	6,628,256	9/2003	Nishim	ıra				
	Н	2001/0015712	8/2001	Hashim	oto				
	I	2003/0184569	10/2003	Koga et	al.				
	J	5,815,136	9/1998	Ikeda et	al.				
	K	6,278,429	8/2001	Ruth et al. Helgeson					
	L	5,530,457	6/1996						
			FOREIGN	PATENT DO	CUMENT	rs .	-		
		Document No.	Date	Count	у	Class	Subclass	Translation	
	M								
	7								
	P								
· · · ·	C	THER REFERENCE	CES (Includ	ling Author, Ti	tle, Date,	Pertinent .	Pages, Etc.)		
	Q	13.1: Invited Pap Hashimoto et al.	•			ng cholest	eric liquid	crystals, K.	
	R		Black and white photo-addressable electronic paper using encapsulated choles iquid crystal and organic photoconductor, T. Kakinuma et al., IDW 2002, pp. 345-1348.						
Examiner:		/Nitin Pate	el/		Date Con	sidered	01/1	9/2010	
*Examiner	:	Initial if reference of MPEP 609; Draw l copy of this form w	ine through	citation if no	in confo	rmance and			

JAP11 Rec' PCT/PTO 28 JUL 2006

Form PTO-1449

U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE

ATTY. DOCKET NO. 36969US1

SERIAL NO. **TBD** 

INFORMATION DISCLOSURE CITATION BY APPLICANT (USE SEVERAL SHEETS IF NECESSARY)

APPLICANT:

J. William Doane et al.

GROUP ART UNIT:

Page 9 of 12

FILING DATE: **Herewith** 

h TBD

					lei ewith		160	
			U.S. PA	TENT DOCU	MENTS			
Examiner Initial		Document No.	Date	Name		Class	Subclass	Filing Date
	Α	6,268,841	7/2001	Cairns et al.				
	В	2003/0011549	1/2003	Murahash	i et al.			
	С	5,172,108	12/1992	Wakabayashi et al.				
	D	2003/0031845	2/2003	Umeya e	et al.			
	Е	6,864,435	3/2005	Hermanns	et al.			
	F	5,996,897	12/1999	Pranc	Z			
Ì	G	2005/0162606	12/2004	Doane e	t al.			
	Н	5,625,477	4/1997	Wu et	al.			
	I	2005/0001797	2/2004	Miller, ΓV	et al.			
	J	5,636,044	6/1997	Yuan et	Yuan et al.			
	K	7,009,666	3/2006	Khan et al.				
	L	6,819,310	11/2004	Huang e	t al.			
			FOREIGN	PATENT DO	CUMENT	rs		
		Document No.	Date	Count	ry	Class	Subclass	Translation
	M							
	N							
	P							
	C	THER REFEREN	CES (Includ	ling Author, T	itle, Date,	Pertinent	Pages, Etc.)	
	Q	Characterization IDW 2002, pp. 13		a Pod", a nov	el idea fo	r electronic	paper, S. N	Maeda et al.,
	R Holographic polymer-dispersed liquid crystals (H-PDLCs), T.J. Bunning et al., Annu. Rev. Mater. Sci 2000, 30:83-115, pp. 83-115.							
Examiner:	•	/Nitin Pa	itel/		Date Cor	nsidered	01/19	/2010
*Examiner	:	Initial if reference MPEP 609; Draw copy of this form v	line through	citation if no	t in confo	rmance and		

40/587591 211 Roc'd PCT/PIO 28 JUL 200

Form PTO-1449

U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE

ATTY. DOCKET NO. 36969US1

SERIAL NO.

TBD

INFORMATION DISCLOSURE CITATION
BY APPLICANT
(USE SEVERAL SHEETS IF NECESSARY)

APPLICANT:

J. William Doane et al.

Page 10 of 12

FILING DATE: Herewith

GROUP ART UNIT:

			U.S. PAT	ENT DOCU	MENTS			
Examiner Initial		Document No.	Date	Nam	e	Class	Subclass	Filing Date
	Α	6,850,217	2/2005	Huang e	et al.			
	В							
	С							
	D							
	Е							
	F				·			
	G							
	Н							
	I							
			FOREIGN I	PATENT DO	CUMEN	TS		
		Document No.	Date	Count	ry	Class	Subclass	Translation
	J							
	K							
	L							-
	C	OTHER REFERENCE	CES (Includi	ing Author, T	itle, Date	, Pertinent	Pages, Etc.)	
	M	Reflective multico 97 Digest, pp. 101		using cholest	eric liqui	d crystals, l	M. Okada et	al., Proc, SID
	N	Multiple color hig al., Proc IDRC (24		reflective ch	olesteric	liquid crys	tal display, I	D. Davis et
	P	Full color (4096 of Proceedings of As					X. Huang et	al.,
Examiner:		/Nitin Pate	<b> </b> /		Date Co	nsidered	01/19/2	2010
*Examiner		Initial if reference of MPEP 609; Draw I copy of this form v	ine through	citation if no	t in confo	ormance and		

Form PTO-1449

U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE

ATTY. DOCKET NO. 36969US1

SERIAL NO. - ZUU TBD

INFORMATION DISCLOSURE CITATION
BY APPLICANT
(USE SEVERAL SHEETS IF NECESSARY)

APPLICANT:

J. William Doane et al.

Page 11 of 12

FILING DATE: Herewith

GROUP ART UNIT:

						<del> </del>		
			U.S. PA	TENT DOCU	MENTS			
Examiner Initial		Document No.	Date	Nam	ne	Class	Subclass	Filing Date
	A							
	В							
	С							
	D					-		
	Е							
	F							
	G				10-10			<u> </u>
	Н							
	I							
			FOREIGN	PATENT DO	CUMENT	rs		
		Document No.	Date	Coun	try	Class	Subclass	Translation
	J			<u> </u>				
	K							
ļ	L							
	C	OTHER REFERENCE	CES (Includ	ling Author, I	itle, Date,	Pertinent l	Pages, Etc.)	
	M	Jing-Jou Tang et a BiMOS Process, 0				PSCT LCL	Using Hig	h-Voltage
	N	http://www/us.ser for dot matrix gra					LCD/row/co	olumn driver
	P 40CH Segment/Driver for Dot Matrix LCD, KS0065B, Samsung Electronics, 12 pages.							
Examiner:	, ,	/Nitin Patel/		:	Date Cor	nsidered	01/19/2	010
*Examiner: Initial if reference considered, regardless of whether citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.								

U.S. DEPARTMENT OF COMMERCE ATTY BOCKET NO. 4 SERIAL NO. 2015 Form PTO-1449 PATENT AND TRADEMARK OFFICE 36969US1 **TBD** INFORMATION DISCLOSURE CITATION APPLICANT: BY APPLICANT J. William Doane et al. (USE SEVERAL SHEETS IF NECESSARY) FILING DATE: GROUP ART UNIT:

	Page 12 of 12				Herewi	DATE:	TBD	IP ART UNIT:
			U.S. PA	TENT DOC	UMENT	rs	•	
Examiner Initial		Document No.	Date	Nar	ne	Class	Subclass	Filing Date
	A							
	В							
	С						<u> </u>	
	D							
	E							<u> </u>
	F					· _		
	G							
	Н							-
	I							
			FOREIGN	PATENT DO	CUME	NTS	3	
		Document No.	Date	Cour	ıtry	Class	Subclass	Translation
	J			·				
	K							
	L							
	C	THER REFERENCE	CES (Includ	ling Author,	Title, Da	ite, Pertinent	Pages, Etc.)	
4	M	Doane, J. William Flexible Flat Pan (2005) pgs. 331-3	el Displays					
	N	Doane, J. William Applications & Us	, " <u>Polymer</u> ses, Ed. Bir	Dispersed L endra Bahad	iquid Cr ur (Worl	ystal Displays ld Scientific P	s", in <i>Liquia</i> Pub. 1990), (	l Crystals: Chapter 14,
	Р	Luo, F.C., "Active Matrix LC Displays", in Liquid Crystals: Applications & Uses, (ed. Bahadur), World Scientific, Singapore, Chapter 15, pgs. 397-436.						
	Q							
Examiner:		/Nitin Patel	/		Date (	Considered	01/1	9/2010
*Examiner	:	Initial if reference of MPEP 609; Draw l copy of this form w	ine through	citation if n	ot in con	nformance and		